



Epidemiologic Notes & Reports

Volume 32 Number 12

December 1997

Preventing Allergic Reactions to Natural Rubber Latex in the Workplace

-The following article is reproduced from a NIOSH Alert-

Workers with ongoing exposure to natural rubber latex* should take the following steps to protect themselves:

- 1 Use nonlatex gloves for activities that are not likely to involve contact with infectious materials (food preparation, routine housekeeping, maintenance, etc.).
- 2 Appropriate barrier protection is necessary when handling infectious materials.† If you choose latex gloves, use powder-free gloves with reduced protein content.‡
- 3 When wearing latex gloves, do not use oil-based hand creams or lotions (which can cause glove deterioration) unless they have been shown to reduce latex-related problems and maintain glove barrier protection.
- 4 Frequently clean work areas contaminated with latex dust (upholstery, carpets, ventilation ducts, and plenums).
- 5 Frequently change the ventilation filters and vacuum bags used in latex-contaminated areas.
- 6 Learn to recognize the symptoms of latex allergy: skin rashes; hives; flushing; itching; nasal, eye, or sinus symptoms; asthma, and shock.
- 7 If you develop symptoms of latex allergy, avoid direct contact with latex gloves and products until you can see a physician experienced in treating latex allergy.
- 8 If you have latex allergy, consult your physician regarding the following precautions:
 - Avoid contact with latex gloves and products.

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- Avoid areas where you might inhale the powder from the latex gloves worn by others.
 - Tell your employers, physicians, nurses, and dentists that you have latex allergy.
 - Wear a medical alert bracelet.
- 9 Take advantage of all latex allergy education and training provided by your employer.

* In this warning sheet, the term "latex" refers to natural rubber latex and includes products made from dry natural rubber. Natural rubber latex is the product manufactured from a milky fluid derived mainly from the rubber tree, *Hevea brasiliensis*.

† CDC (Centers for Disease Control and Prevention) (1987). Recommendations for prevention of HIV transmission in health-care settings. MMWR 36 (S2).

‡ The goal of this recommendation is to reduce exposure to allergy-causing proteins (antigens). Until well accepted standardized tests are available, total protein serves as a useful indicator of the exposure of concern.

WARNING!

Workers exposed to latex gloves and other products containing natural rubber latex may develop allergic reactions such as skin rashes; hives; nasal, eye, or sinus symptoms; asthma; and (rarely) shock.

For additional information, see **NIOSH Alert: Preventing Allergic Reactions to Natural Rubber Latex in the Workplace** [DHHS (NIOSH) Publication No. 97-135]. Single copies of the Alert are available free from the following: Publications Dissemination, EID, National Institute for Occupational Safety and Health, 4676 Columbia Parkway, Cincinnati, OH 45226-1998. Fax number: (513) 533-8573. Phone number 1-800-35-NIOSH. E-mail: pubstaft@niosdt1.em.cdc.gov

Immunization Schedules

Kentucky's childhood immunization regulation (902 KAR 2:060) was revised and became effective January 1, 1997. (See February 1997 issue of Epidemiologic Notes and Reports.) Since then Immunization Program staff have received a number of questions about the changes and the scheduling of immunizations. The summary below may assist health care providers in delivering care and in answering questions from families, day care and preschool centers, as well as schools and other facilities caring for children.

*Vaccines added to the immunization requirements were hepatitis B, mumps and *Haemophilus influenzae* type b (Hib).

*Any child attending public or private primary or secondary school or a preschool program is required to provide the school with a current immunization certificate within two

weeks of attendance, unless the local board of education requires an up-to-date certificate upon entry (note that this requirement is for attendance, not just enrollment).

*Each child cared for in a day care center, certified family child care home or other licensed facility that provides child care needs to have a current immunization certificate on file within 30 days of entrance/admission to the program or facility.

* Our measles elimination strategy is now age-based, rather than tied to school entrance. Although not part of Kentucky's immunization regulation, welfare reform specified a second MMR for those receiving food stamps or Temporary Assistance to Needy Families (TANF) at age four years and one month or older.

Table 1. The Ideal Schedule

Age	Dose	Immunization
Zero to 2 months	1st	Hepatitis B
One to 4 months	2nd	Hepatitis B
2 months	1st	DTaP or DTP; Hib; IPV or OPV
4 months	2nd	DTaP or DTP; Hib; IPV or OPV
6 months	3rd	DTaP or DTP; Hib (unless the first two doses were meningococcal protein conjugate)
6-18 months	3rd	Hepatitis B; OPV or IPV
12-15 months	1st	MMR
	3rd or 4th	Hib
12-18 months	4th	DTaP or DTP
Between 4 years and entry to school, preschool, day care, certified family child care or other licensed facility	5th	DTaP or DTP
	4th	OPV or IPV
	2nd	MMR (If not administered at this age, is required before 6th grade entry.)
11-16 years	Booster	Td

Table 2. Required Schedule for Age

Age	Immunizations Required*
>3 months	None
≥3 - < 5 months	1 DTaP or DTP ¹ ; 1 IPV or OPV; 1 Hib
≥5 - < 7 months	2 DTaP or DTP ¹ ; 2 IPV or OPV ¹ ; 2 Hib
≥7 - < 12 months	3 DTaP or DTP ¹ ; 2 OPV or IPV ¹ ; 3 Hib ²
≥12 - < 16 months	3 DTaP or DTP ¹ ; 2 OPV or IPV ¹ ; 3 Hib ³ or 2 ≥12 months or 1 ≥15 months
≥16 - < 19 months	4 DTaP or DTP ¹ ; 2 OPV or IPV ¹ ; 4 Hib ^{2,3} ; 1 MMR ≥12 months
≥19 - < 49 months	4 DTaP or DTP ¹ ; 3 OPV or IPV ¹ ; 4 Hib ^{2,3} ; 1 MMR ≥12 months
≥49 - < 5 years	4 DTaP or DTP ¹ , 1 on or after age 4 years; 3 OPV or IPV ¹ , 1 on or after age 4 years; 4 Hib ^{2,3} ; 1 MMR ≥ age 12 months & 2nd measles, preferably MMR, given at least 1 month later to children born 10/01/90 or later AND effective 8/1/98, 3 hepatitis B for those born 10/1/92 or later
≥5 - < 7 years	4 DTaP or DTP ¹ , 4th on or after age 4 years; 3 OPV or IPV ¹ , 3rd on or after 4 years; 1 MMR on or after age 12 months & 2nd measles, preferably MMR, given at least 1 month later to children born 10/01/90 or later AND effective 8/1/98, 3 hepatitis B for those born 10/1/92 or later
≥7 years	4 DTaP or DTP ¹ , 4th on or after age 4 years, or 3 Td ≥ age 7 years, or a combination of 3 DTaP, DTP and Td; 3 OPV or IPV ¹ , 3rd on or after 4 years; 1 MMR on or after age 12 months & 2nd measles, preferably MMR, given at least 1 month later to children born 10/01/90 or later AND effective 8/1/98, 3 hepatitis B for those born 10/1/92 or later
At 6th grade entry	1 MMR on or after 12 months and 2nd measles-containing vaccine, preferably MMR, at least 1 month later
≥10 years since last DTaP, DTP or Td	1 Td

NOTES

* Enforceable according to the revised regulation.

1. Or combinations of DTaP and DTP and or combinations of OPV and IPV.

2. If first two doses of Hib vaccine were meningococcal protein conjugate, the third dose may be omitted

3. If Hib vaccine has been administered on or after 15 months of age the child is not required to have further doses.

Occupational Burn Surveillance in Kentucky

Contributed by: Amy Scheerer, MSPH, Tim Struttman, MSPH, Kentucky Injury Prevention and Research Center and Michael Auslander, DVM, MSPH, Kentucky Department for Public Health.

Occupational burns place a tremendous burden on the workforce, the medical community, and employers in Kentucky. To address this issue, the staff at the Kentucky Injury Prevention and Research Center (KIPRC), in cooperation with the Kentucky Department for Public Health, will establish a statewide occupational burn surveillance system to identify causes and trends and to monitor progress toward reducing these injuries. Data collection will begin in January, 1998 with funding renewable for five years. Kentucky is one of two states funded by the National Institute for Occupational Safety and Health (NIOSH) to conduct occupational burn surveillance.

This project will build upon an existing occupational injury surveillance structure at KIPRC and expand capacity to include work-related burn injuries. The project objectives are to: 1) identify the incidence of burns as an occupational injury; 2) quickly identify trends in burn cases; 3) develop and implement interventions to reduce the incidence of burn injury; and 4) evaluate the economic savings of interventions. In addition, surveillance activities will promote the collaborative and cooperative efforts of local public health departments, hospitals, research organizations, community members, and agencies with interests in occupational safety.

Case definition: A person who suffers a thermal, electrical, chemical, friction, or radiation burn in the course of work and seeks medical treatment. Cases of work-related burns will be identified primarily through hospital burn units, emergency departments, Kentucky Department of Workers' Claims, Kentucky Employers' Mutual Insurance (KEMI), and death certificates. Data will be used to generate presentations and publications such as hazard alerts, newsletters, case reports, and prevention materials for dissemination to interested groups and individuals, including: workers and employers, trade organizations, health professionals, public agencies, and the general public via news media.

The medical community, most notably private physicians and emergency department personnel, is in an excellent position to notify KIPRC of work-related burn cases presenting for treatment. Only through the active involvement of medical providers can this project succeed in identifying and ultimately reducing the incidence of these traumatic injuries.

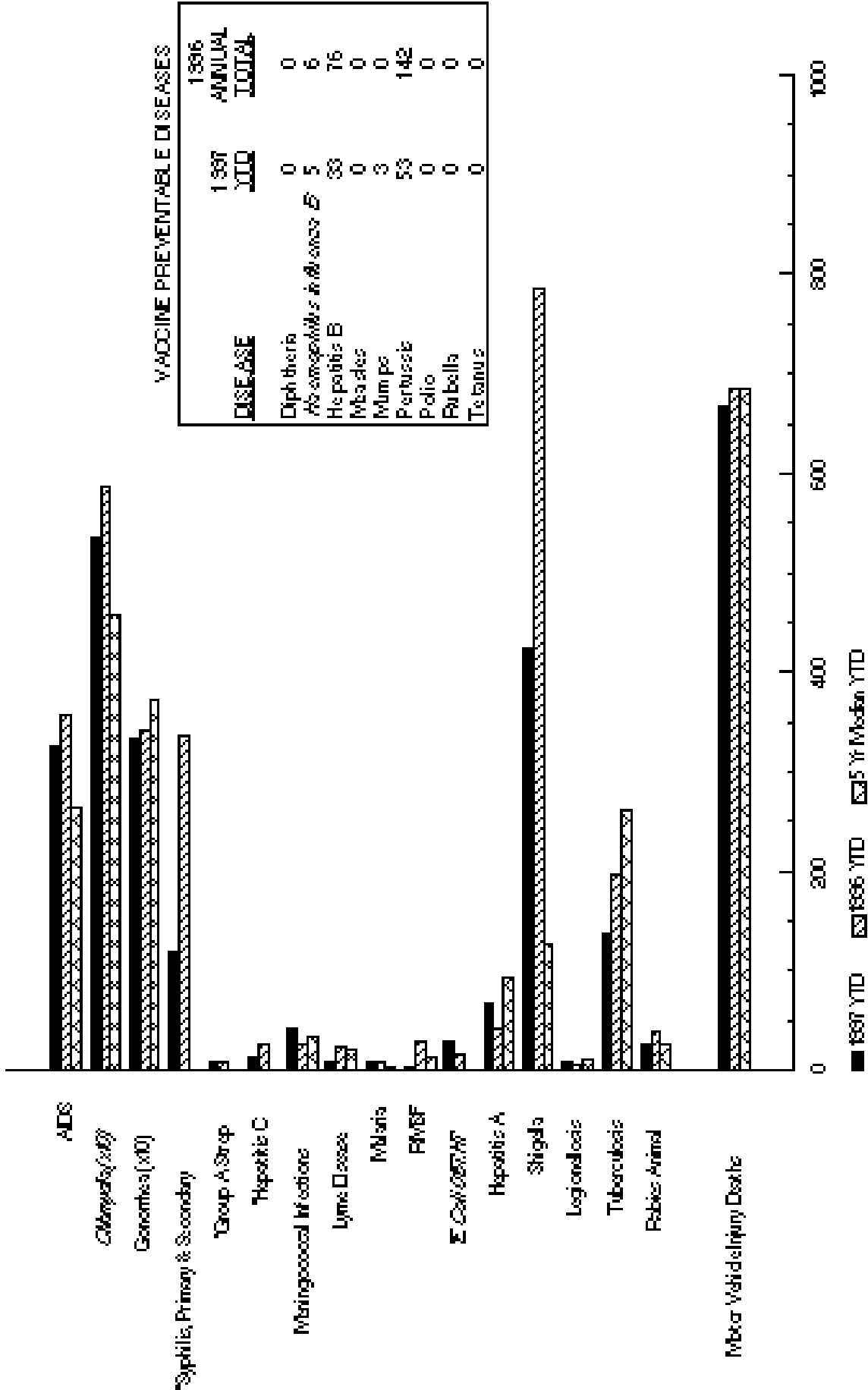
To report cases or to obtain further information, please contact Amy Scheerer, Project Manager, at 606-257-4955 or 800-204-3223.

New Staff Member



The Division of Epidemiology and Health Planning is very happy to announce the arrival of Sandra "Sandi" Gambescia as Immunization Program Manager. Ms. Gambescia is a Centers for disease control and Prevention Public health advisor who has been assigned to Kentucky for an indefinite period. if you have questions relating to

CASES OF SELECTED REPORTABLE DISEASES IN KENTUCKY, YEAR TO DATE (YTD) THROUGH OCTOBER 1987



*Historical data are not available.
Disease numbers reflect only those cases which meet the CDC surveillance definition.
Contributed by: Patricia Butler, Surveillance & Investigation Branch.

KENTUCKY EPIDEMIOLOGIC NOTES & REPORTS

Printed With State Funds

by the

COMMONWEALTH OF KENTUCKY
CABINET FOR HEALTH SERVICES
DEPARTMENT FOR PUBLIC HEALTH
275 EAST MAIN STREET
FRANKFORT, KENTUCKY 40621

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Laboratory Testing for *Mycobacteria*

Contributed by: Norma Carlin, Division of Laboratory Services.

The Division of Laboratory Services has implemented several measures to shorten the time period needed to identify the organism, *Mycobacterium tuberculosis*. A liquid culture system has been added to our culture protocol. This automated system reads the cultures every ten minutes and notifies us if growth is detected in the culture. Cultures may be positive within one day to six weeks, depending upon the numbers of organisms present in the specimen. The average time for detection of growth is 12 days. Cultures are held for six weeks before being reported as negative.

DNA probes have been used for several years to identify *Mycobacterium tuberculosis* complex, *Mycobacterium avium* complex, and *Mycobacterium gordonae*. Recently, we have started identifying *Mycobacteria* by use of High Performance Liquid Chromatography (HPLC). The use of DNA probes and HPLC enables the laboratory staff to identify the individual *Mycobacterium* species within one day as compared to several weeks by the traditional biochemical method.

We are preparing to evaluate a transcription-mediated amplification (MTD) test, which can detect as little as one copy of DNA or RNA in a clinical sample. The test is performed on specimens with a positive acid-fast smear from patients who are not receiving treatment for *Mycobacterium tuberculosis*. A positive MTD test is an excellent indicator of the presence of *Mycobacterium tuberculosis*. The sensitivity and specificity of the test are 95.5% and 100% respectively. After the trial run, the test will be evaluated for usefulness in the management of the disease within Kentucky. For further information contact Ms. Carlin, at 502-564-4446.

SEASON'S GREETINGS

From the Department for Public Health and Staff of the Division of Epidemiology and Health Planning